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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/904,121	07/31/1997	JOHN H VRZALIK	7030301.1900	3409

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WAYNE J COLTON INC
THE MILAM BUILDING SUITE 1032
115 EAST TRAVIS STREET
SAN ANTONIO, TX 78205

EXAMINER

HO, THOMAS Y

ART UNIT PAPER NUMBER

3677

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/904,121

Applicant(s)

VRZALIK, JOHN H

Examiner

Thomas Y Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13, 15-18, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston USPN4409695 in view of Weismiller USPN5317769.

As to claim 1, Johnston discloses a bariatric bed comprising: a frame 2 adapted to support patients having weights in the range of 500 to 800 pounds (col.1, ln.30-35); said frame 2 including an articulated mattress support 3 for supporting a mattress; said support 3 including at least first 6, second 5, and third 4 articulatable sections positioned to support a leg region, a seat region, and a head region, respectively, of the mattress supported on said support 3 (col.2, ln.60-65); an articulation mechanism 50/50 for articulating the mattress support 3 from a relatively horizontal, lying position to a seated position (fig.4); controls 57/58 for tilting the mattress support 3 lengthwise. The difference between the claims and Johnston is the claims recite a raise-and-lower mechanism for generally raising and lowering the entire mattress support relative to a floor-engaging portion of the frame. Weismiller discloses a hospital bed similar to that of Johnston. In addition, Weismiller further discloses a raise-and-lower mechanism for generally raising and lowering an entire mattress support (unnumbered; elongated member directly under the mattress; see Figure A provided below) relative to a floor-engaging portion 14 of a frame 12. It would have been obvious to one of ordinary skill in the art, having the

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disclosures of Johnston and Weismiller before him at the time the invention was made, to modify the frame disclosed by Johnston to have a raise-and-lower mechanism and frame, as taught by Weismiller, to obtain an articulated mattress support mounted on a frame member, which frame member is part of a raise-and-lower mechanism. One would have been motivated to make such a combination because the ability to set a bed at various heights and positions, which is required for activities and therapies, would have been obtained, as taught by Weismiller (col.1, ln.10-20).

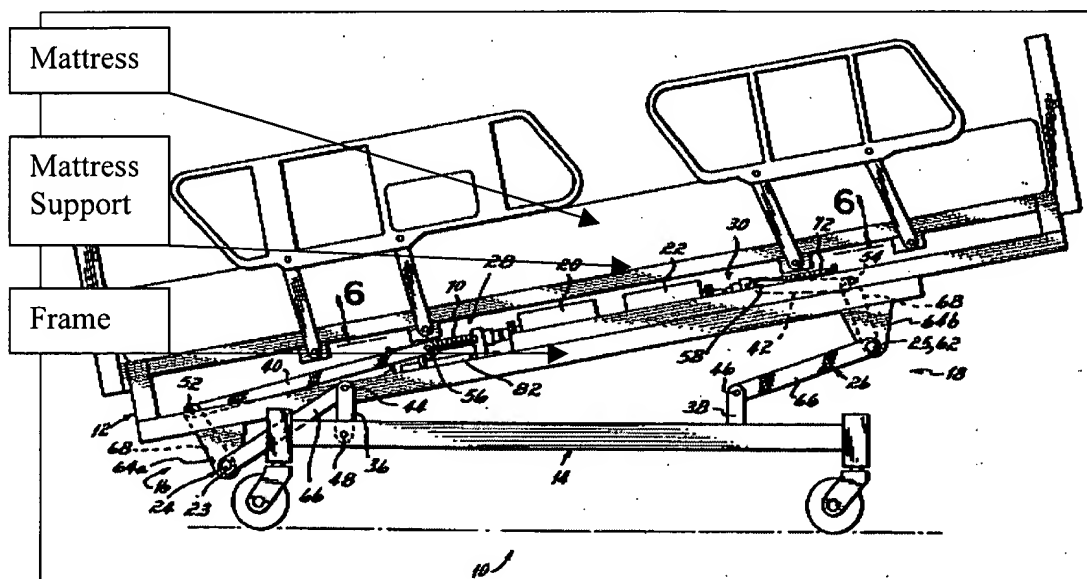


Figure A

As to claim 2, Johnston discloses first 6, second 5, and third 4 articulatable sections.

Weismiller teaches the raise-and-lower mechanism comprises a head end torque arm 66 and a leg end torque arm 66; each said torque arm being pivotally disposed upon said frame 12; said leg end torque arm 66 being adapted to support said second section from a first pair of diverse points; the second section is the middle section of the bed; said first pair being substantially adjacent said first section (the first section is the foot portion of the bed, and the first pair of diverse points can be any of a several link points located adjacently under the first section); said

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head end torque arm 66 being adapted to support said second section form a second pair of laterally diverse points; said second pair being substantially adjacent said third section (the third section is the head section of the bed, and the second pair of diverse points can be any of several link points located adjacently under the third section).

As to claim 3, Weismiller teaches each said torque arm 66 is independently actuatable.

As to claim 4, Johnston discloses first 6, second 5, and third 4 articulatable sections. Weismiller teaches the raise-and-lower mechanism further comprising a leg end jack 20 and a head end jack 22; said leg end jack being adapted to actuate said leg end torque arm 66 for raising and lowering of the portion of said second section adjacent said first section (all sections are raised and lowered on Weismiller because the mattress support is mounted on a frame that is raised and lowered); said head end jack being adapted to actuate said head end torque arm 66 for raising and lowering of the portion of said second section adjacent said third section (all sections are raised and lowered on Weismiller because the mattress support is mounted on a frame that is raised and lowered).

As to claim 5, Weismiller teaches said leg end jack 22 is actuatable by a first jack motor; said head end jack 20 is actuatable by a second jack motor.

As to claim 6, teaches each said jack motor 51 is a linear actuator type motor.

As to claim 7, teaches said raise-and-lower mechanism is adapted to position said mattress support in up to 10° Trendelenburg.

As to claim 8, Weismiller teaches said raise-and-lower mechanism is adapted to position said mattress support in up to 12° reverse Trendelenburg.

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As to claim 9, Johnston discloses a bariatric bed wherein said mattress support 3 comprises a radiolucent section 63; said radiolucent section 63 being adapted to allow radiographic examination of a patient while positioned upon said mattress support 3 (col.4, ln.61-69; col.5, ln.1-10).

As to claim 10, Johnston discloses a bariatric bed wherein said radiolucent section 63 comprises a radiolucent window through said third articulatable section 4 (col.5, ln.5-9).

As to claim 11, Johnston discloses a bariatric bed wherein said radiolucent window 63 comprises an X-ray cassette tray (col.5, ln.5-7).

As to claim 12, Johnston discloses a bariatric bed wherein said X-ray cassette tray is adapted to permit insertion and removal of an X-ray film without repositioning of the patient under radiographic examination (col.5, ln.1-9).

As to claim 13, Johnston discloses a bariatric bed wherein said X-ray cassette tray comprises a mechanism adapted for positioning of an X-ray film within said X-ray cassette (the mechanism can be any number of surfaces defined by 63/64/65); said mechanism being independently operable from either side of said bariatric bed. Figure 8 of Johnston clearly shows that the space for the X-ray cassette tray extends through both sides of the bed.

As to claim 15, Johnston discloses a bariatric bed wherein said articulation mechanism comprises a head-up jack 52 (fig.2) dependently interposed between said second articulatable section 5 and said third articulatable section 4; said head-up jack 52 being adapted to articulate said third section 4 relative to said second section 5 for raising and lowering of the head region of the mattress.

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As to claim 16, Johnston discloses a bariatric bed wherein said articulation mechanism comprises a leg-down jack 50 (fig.2) dependently interposed between said second articulatable section 5 and said first articulatable section 6; said leg-down jack 50 being adapted to articulate said first section 6 relative to said second section 5 for raising and lowering of the leg region of the mattress.

As to claim 17, Johnston discloses a bariatric bed wherein said head-up jack 52 and leg-down jack 50 are cooperatively adapted to position the mattress support as a cardiac chair (Fig.2). Weismiller teaches a leg end jack 20 and a head end jack 22.

As to claim 18, Johnston discloses a bariatric bed wherein said head-up jack 52 and leg-down jack 50 are cooperatively adapted to articulate the mattress support 3 into a position that facilitates patient ingress and egress over the leg region 6 of the mattress (col.1, ln.50-52; col.6, ln.1-7). Weismiller teaches the articulation mechanism also having a leg end jack 20 and a head end jack 22.

As to claim 21, Johnston discloses a bariatric bed further comprising a plurality of laterally adjustable side rails 9; each said side rail 9 being collapsible to a transport position (fig.2) within the side planes of said frame 2. A non-transport position (fig.4, fig.10) has side rails extended out of the plane of the frame at a 45-degree angle.

As to claim 22, Johnston discloses a bariatric bed wherein; at least one said side rail 9 comprises an interiorly positioned, integral bed control 57/58; said bed control comprising a display and being adapted to effect articulation of said mattress support 3 (col.4, ln.41-44).

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Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston USPN4409695 in view of Weismiller USPN5317769, and further in view of Bumbalough USPN5393938.

As to claim 14, the difference between the claims and Johnston is the claims recite said frame further comprises an integral scale; said scale being adapted to determine the weight of a patient positioned upon said mattress support. Bumbalough discloses a patient bed similar to that of Johnston. In addition, Bumbalough further teaches an in-bed patient scale mounted on a frame. It would have been obvious to one of ordinary skill in the art, having the disclosures of Johnston and Bumbalough before him at the time the invention was made, to modify the bed disclosed by Johnston to have an integral scale on a frame, as taught by Bumbalough, to obtain a bed having an integral scale on the frame. One would have been motivated to make such a combination because the ability to monitor fluctuations in a patient's weight where sick patients or bedridden patients are not required to get up from bed, and to track fluctuations in a patient's weight without forcing the patient out of the bed, would have been achieved, as taught by Bumbalough (col.2, ln.12-26; col.3, ln.30-38).

Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston USPN4409695 in view of Weismiller USPN5317769, and further in view of Richards USPN5295276.

As to claim 19, Johnston discloses a bariatric bed further comprising a foot board assembly (83). The difference between the claims and Johnston is the claims recite said foot board assembly being adapted to articulate relative to said first section, from a resting position, when a force is applied thereto, but to increasingly resist said force with increasing degree of

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articulation. Richards discloses a patient bed similar to that of Johnston. In addition, Richards further teaches a foot board assembly 20 adapted to articulate relative to a leg section, from a resting position, when a force is applied thereto, but to increasingly resist said force with increasing degree of articulation (col.8, ln.25-44). It would have been obvious to one of ordinary skill in the art, having the disclosures of Johnston and Richards before him at the time the invention was made, to replace the foot board on the bed disclosed by Johnston with a resilient foot board, as taught by Richards, to obtain a foot board assembly adapted to articulate and resist under force. One would have been motivated to make such a combination because the ability for a patient to exercise his/her feet by exerting force against the foot board would have been obtained, as taught by Richards (col.8, ln.25-44).

As to claim 20, Richards teaches said foot board assembly comprises a dampening member 22; said dampening member adapted to prevent rapid returns of said foot board assembly to said resting position. Richards discloses a foot board assembly comprising a dampening member 22 made of fire-retardant foam (col.5, ln.34-37), wherein it is commonly known that foam does not cause rapid return to shape or any great resilient force with resilient force being provided by the connection to the mattress.

Response to Arguments

Applicant's arguments filed 8/13/03 have been fully considered but they are not persuasive.

As to Johnston USPN4409695, the examiner agrees to the following points: Johnston discloses as a principal object of the invention the need to provide a bed having "great structural rigidity and strength to accommodate patients"; the center section 5 of the mattress support 3

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should be rigidly positioned above a frame element 2 of the bed by spaced pedestals 44/45 reinforced by a number of gussets 47; and lift means for articulating the head and foot sections without movement of the middle section 5 which is mounted to a frame element 2. As to Weismiller USPN5317769, the examiner agrees that a mechanism for articulating the patient support frame 12 is not disclosed. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the suggestion to combine Johnston and Weismiller is found in Weismiller which teaches the desirability of having a bed that can be raised and lowered, as well as set to Trendelenberg positions (col.1, ln.10-20; col.2, ln.55-70). The passage cited by applicant from Johnston (pg.5 of response) states that a bed with great structural rigidity and strength is a principal object of the invention. However, this passage does not necessarily teach away from the combination of Johnston and Weismiller, as proposed by applicant. There is no stated connection in Johnston between the number of linkages and the structural rigidity. The

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combination taught by Johnston and Weismiller could be structurally rigid and have strength while being able to achieve the raised and lowered positions shown in Weismiller.

In response to applicant's argument that no reasonable observer would characterize Weismiller's lift and tilt mechanism as providing the structural rigidity and strength desired by Johnston, it should be noted that Weismiller does not disclose any weight limit, or torque and stress limit for his apparatus. Unless evidence is provided, there is no reason to believe that the Weismiller apparatus could not provide the characteristics desired by Johnston.

In response to applicant's argument that there is no obvious combination of Johnston and Weismiller, the examiner will provide a detailed explanation hereinafter. Johnston discloses a mattress support 3/44/45 (composed of articulatable sections 4/5/6; analogous to elements shown in Figure A above in Weismiller) mounted on a frame member 2/14 (analogous to 14 in Weismiller; see Figure 5), having jack members 50/50 mounted to the frame member 2/14 so articulation can be carried out (4 and 6 tiltable relative to middle portion 5 which is rigidly fixed to frame member 2/14). Weismiller discloses a mattress support (unnumbered rail portion under the mattress; between the lower surface of the mattress and the lower longitudinal portion of frame 12; see Figure A above), mounted on a frame member 12, which is in turn supported on a lower frame member 14, with the frame member 12 able to be raised and lowered to various positions. The combination of Johnston and Weismiller would teach that the mattress support 3/44/45 of Johnston, (analogous to the mattress support of Weismiller; see Figure A above), mounted on a rigid frame member 12 of Weismiller, rather than directly mounted to the lower frame portion denoted by 2/14 in Johnston (analogous to 14 in Weismiller). In this combination, the jack members 50 of Johnston still articulate the head and foot sections relative to the middle

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section of the mattress support, with the whole mattress support mounted on a frame 12 of Weismiller that allows the whole mattress support member to be raised and lowered because this function is desirable (as taught by Weismiller). In the combination rejection of Johnston in view of Weismiller, the pedestals 44/45 of Johnston would be mounted on frame member 12 of Weismiller, or equivalently, the frame 2/14 of Johnston is considered analogous to the frame 12/14 of Weismiller.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Y Ho whose telephone number is (703)305-4556. The examiner can normally be reached on M-F 10:00AM-6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J Swann can be reached on (703)306-4115. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-1113.

TYH


ROBERT J. SANDY
PRIMARY EXAMINER